

BOF	RING	LOG)				PROJECT					JOB NO.		SHEET NO.		HOLE NO.
			1			METCALF	ENERG	Y CI	ENTE		24193-100	1	1 OF		B-110	
SITE COORDINATES STACK N 1,905,345.79; E 6,198,746													ANGLE FROM H	ORIZ.	BEARING	
BEGUN COMPLETED DRILLER 4/26/1999 4/27/1999 TREATWELL & ROLLO (I									י ווםר	INIC	DRILL MAKE AND MODEL FAILING 1500	HOLE SIZE	OVERBURDEN 101.5		ROCK	TOTAL DEPTH
CORE RECOVERY CORE BOXES								HEK L	JKILI	LING)	SAMPLES EL. TOP OF CASING	GROUND EL.	DEPTH/EL. OF G		DEPTH/EL. TOP	101.5 OF ROCK
AMDIEL	IAMMED I	WEIGHT\FA		NON	E			CASING	LECT	IN HOLE	24 DIA./LENGTH	249.78	LOGGED BY:			
		NCHES						NONE		IN HOLE	DIA/LENGTH		KR BELL			
				PE	NETRAT	TION									NOTES ON WAT	
					BLOWS						DESCRIPTION A	AND CLASS	SIFICATION		CHARACTER OF	
AMPLE TYPE IND DIAMETER	AMPLE ADVANCE	AMPLE RECOVERY	AMPLE BLOWS *N* ERCENT CORE RECOVERY	ST 6 INCHED	ND 6 INCHES	RD 6 INCHES	ELEVATION	ЭЕРТН	BRAPHIC LOG	AMPLE						
ຶ ∢ SS	ω 18"	9" 9 5 5 4 1 Dark brown, medium stiff, SILT								0-2.5" 6" (liameter					
													auger, bel	ow 2.5'		
															wash boring with	
SS	18"	14"	6	3	3	3		_		2	Dark brown, medium stiff,	SILT			drilling mu	d
SS	18"	15"	9	2	4	5		5		3	Brown, medium stiff, fine s	andy SILT			 	
	10	13	3	-	-	3	242.78			Ľ	Diown, medium sun, ille s	andy SILI				
SS	18"	18"	11	3	5	6				4	Brown, medium dense, fin	e to mediun	n SAND		1	
	40"	40"	-	-	L.			10		<u> </u>						
SS	18"	12"	29	2	10	19	238.78			5	Top: same Bottom 6": Brown, mediun	n dense siltv	/ fine to coal	rse		
											SAND	r derise siit)	Time to coal	100		
SS	18"	9"	26	9	16	10	235.78			6	Brown, medium dense, sil	ty fine to co	arse SAND			
								15								
SS	18"	10"	26	11	14	12				7	Brownish gray, medium de SAND and GRAVEL	ense, fine to	coarse			
											SAND and GRAVEE					
								20								
SS	18"	10"	33	15	13	20				8	Brownish gray, dense, fine	to coarse S	SAND and		-	
					-						GRAVEL					
		+		1												
								25								
SS	18"	12"	22	12	9	13	223.78			9	Top: same		_			
		+			-						Bottom,: Brown and gray,	mottled, ver	y stiff, silty (CLAY	-	
					-											
		+		1				30								
SS	18"	12	18	6	7	11				10	Gray, very stiff CLAY					
							217.78						_		Gravels at	32'
		-			-											
		+		-				35							-	
S = SPLI	SPOON:	ST = SHEL	BY TUBE; M	CS = MO	DIFIED (CALF. S	AMPLER	SITE		1					HOLE NO.	
			O = OTHER					STAC	<						B-110	



200	_	PODING LOG																
BOI	RINC	3	LOG					PROJECT METCALF I						JOB NO. 24193-100		SHEET NO. 2 OF	3	HOLE NO. B-110
SITE STACK						DINATES 905,345		6,198,746.	24						ANGLE FROM HO	ORIZ.	BEARING	
BEGUN 4/22/19	99		COMPLETE 4/27/199		DRILLE	ER		OLLO (PITO		RILI	JNG)		DRILL MAKE AND MODEL FAILING 1500	HOLE SIZE	OVERBURDEN 101.5		ROCK	TOTAL DEPTH 101.5
CORE RECOVERY CORE BOXES NONE								2 (1.11	SAMPLES EL TOP OF CASING GROUND EL DEPTH/EL OF GWT 24 249.78							DEPTH/EL. TOP OF ROCK		
SAMPLE HAMMER WEIGHTIFALL 140 # \ 30 INCHES									CASING LEFT IN HOLE: DIA/LENGTH LOGGED BY: NONE KR BELL								1	
	, 20					NETRAT							DESCRIPTION	AND CLASS			NOTES ON WAT WATER RETURI CHARACTER OF	N
SAMPLE TYPE	SAMPLE ADVANCE	LENGTH CORE RUN	SAMPLE RECOVERY CORE RECOVERY	SAMPLE BLOWS *N* PERCENT CORE RECOVERY	1ST 6 INCHED	2ND 6 INCHES	3RD 6 INCHES	ELEVATION	рертн	GRAPHIC LOG	SAMPLE							
SS	18"		8"	38	11	20	18				11		Brownish gray, dense, fine to coarse, SAND and					
						-						GRAVE	L					
00	40"			0.5	-	44	0.4		40		40	/NI= ====						
SS	18"		0	35	7	11	24				12	(No reco	overy)					
SS	18"		10"	32	10	12	21		45		13	Browish	gray, dense, fine	to coarse S	AND and			
0	0 10 10 32										-	GRAVEL, 2" brownish red sand seam in middle of						
												sample						
		-						100.70										
SS	18"		12"	47	11	21	23	199.78 198.78	50		14	Brownis	h black, dense, n	nedium to coa	arse SAND			
												Tip mate	erial, Brownish gr and GRAVEL					
									55									
SS	18"		12"	53	22	25	28		33		15	Brownis GRAVE	h gray, very dens L	and				
		_																,
		-				-			60								-	
SS	18"		0"	31	11	13	18		00		16	(No reco	overy)				1	
								187.78					••					
		-															Drilling pro	_
									65								increased	at 62"
SS	18"	1	18"	64	17	29	35		00		17	Brown, I	hard, silty CLAY.	trace fine rou	nded black			
												gravel	. , ,					
		4																
		-							70									
SS = SPL	T SPOOM	N: S	T = SHELB	L Y TUBE; MC	S = MOI	DIFIED (CALF. SA	AMPLER				1					HOLE NO.	
SS 18" 18" 64 17 29 35 17 Brown, hard, silty CLAY, trace fine rounded black gravel SS = SPLIT SPOON: ST = SHELBY TUBE; MCS = MODIFIED CALF. SAMPLER SITE									B-110									
		_																



BOF	G I	LOG					PROJECT METCALF	JOB NO. 24193-1						SHEET NO.		3_	HOLE NO. B-110		
STACK					OF 24			<u> </u>						ANGLE FROM H		BEARING	•		
STACK N 1,905,345.79; E 6,198,746. BEGUN COMPLETED DRILLER 4/22/1999 4/27/1999 TREATWELL & ROLLO (PIT)										ו וופר	ING)		DRILL MAKE AND MODEL FAILING 1500	HOLE SIZE	OVERBURDEN (ROCK	TOTAL DEPTH 101.5	
CORE RECOVERY CORE BOXES									SAMPLES EL. TOP OF CASING					GROUND EL.	DEPTH/EL. OF G		DEPTH/EL. TOP		
NONE SAMPLE HAMMER WEIGHT\FALL									24 249.78 CASING LEFT IN HOLE: DIA/LENGTH LOGGED BY:										
	#\30			_					NONE			. 50 1.7221101			KR BELL				
						BLOWS							DESCRIPTION A	ND CLASS	IFICATION		NOTES ON WATER LEVEL WATER RETURN CHARACTER OF DRILLING		
SAMPLE TYPE AND DIAMETER	SAMPLE ADVANCE	LENGTH CORE RUN	SAMPLE RECOVERY CORE RECOVERY	SAMPLE BLOWS 'N' PERCENT CORE RECOVERY	1ST 6 INCHED	2ND 6 INCHES	3RD 6 INCHES	ELEVATION	DEРТН	GRAPHIC LOG	SAMPLE								
SS	18"	-	0"	45	15	19	26				18	(No reco	overy- Gravel in tip	of spoon)					
		-																	
									75										
SS	18"		0"	26	7	12	14				19	(No reco	overy)						
		\dashv																	
		1																	
									80										
SS	18"	-	18"	50	14	24	26				20	Brown, I	hard, silty CLAY						
									85										
SS	18"	-	18"	33	7	17	19				21		hard, silty, CLAY, t	race fine rou	unded black				
												gravel							
					l _	_			90										
SS	18"	-	18"	15	5	7	8				22	Light bro	own, medium stiff,	silty CLAY					
			-											•					
	4.0"	-	4.0"		<u> </u>	_	00		95		00	D		V "		ll-			
SS	18"	-	18"	29	5	9	20				23	Brown, v gravel	very stiff, silty CLA	r, some fine	e rounded b	iack			
												914401							
														· <u> </u>					
	4.5"	4			-				100			_							
SS	18"	-	18"	73	41	43	30				24	Brown, I	hard, silty CLAY						
		1										Bottom	of hole at 101.5 fee	et. Hole gro	uted to				
													upon completion o						
	<u> </u>								105										
SS = SPLIT SPOON: ST = SHELBY TUBE; MCS = MODIFIED CALF. SAMPLER									SITE STACK								HOLE NO.		